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TIPIN siRNA (m): sc-154283

BACKGROUND

TIPIN (Timeless interacting protein) is a 301 amino acid protein that localizes to both the nucleus and the cytoplasm and belongs to the CSM3 family. Expressed abundantly in liver, thymus, brain and gastrointestinal tract, TIPIN interacts with Timeless and is required for both normal cell cycle progression and for cell survival after DNA damage or replication stress. Additionally, TIPIN may be required to pass the ATR replication checkpoint that is induced by UV light or Hydroxyurea. Human TIPIN shares 72% amino acid identity with its mouse counterpart, suggesting a conserved role between species. The gene encoding TIPIN maps to human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Tipin (mouse) mapping to 9 C.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

PRODUCT

TIPIN siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TIPIN shRNA Plasmid (m): sc-154283-SH and TIPIN shRNA (m) Lentiviral Particles: sc-154283-V as alternate gene silencing products.

For independent verification of TIPIN (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-154283A, sc-154283B and sc-154283C.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

TIPIN siRNA (m) is recommended for the inhibition of TIPIN expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 μ M in 66 μ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor TIPIN gene expression knockdown using RT-PCR Primer: TIPIN (m)-PR: sc-154283-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.